

ATLANTIC COUNTY

Cancer Control and Prevention Capacity and Needs Assessment Report Summary

December 2004

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Medicine is an ever-changing science. As new research and data broaden our knowledge, conclusions may change. The authors and reviewers have endeavored to check the sources of information and to utilize sources believed to be the most reliable in an effort to provide information that is as complete as possible at the time of submission and generally in accord with appropriate standards. However, in view of the possibility of human error or changes in medical science, this work cannot be warranted as being complete and accurate in every respect. Readers are encouraged to confirm the information contained herein with other sources. Information concerning some of the sources of data, rationale for its utilization, acknowledgements of specific parties contributing to these efforts, as well as links to cancer-related information may be found at www.umdj.edu/evalcweb/.

This county-level Report Summary summarizes the larger county report, which is a baseline evaluation of this county, performed as part of the Capacity and Needs Assessment initiative of the New Jersey Comprehensive Cancer Control Plan (www.state.nj.us/health/ccp/ccp_plan.htm), under the direction of the New Jersey Department of Health and Senior Services (NJDHSS) Office of Cancer Control and Prevention (OCCP) (www.state.nj.us/health/ccp/), the University of Medicine and Dentistry of New Jersey (UMDNJ) (www.umdj.edu/evalcweb/), and the Evaluation Committee of the Governor's Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey (Task Force Chair: Arnold Baskies, MD; Evaluation Committee Chair: Stanley H. Weiss, MD).

Comments may be sent to the first author of the Report Summary, Ms. Angela A. Bailey at ce@shoreconnection.com. **Copies of any comments should also be sent to both:** Ms. Knight peg.knight@doh.state.nj.us and Dr. Weiss weiss@umdj.edu.

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Prepared by:

Angela A Bailey, BA
Anna Ruth Thies, RN, BS, MA
Maria Tomassetti, MBA, RHIA
Nicholas Thies, BS
Denyse Adler, MA (editor)

ce@shoreconnection.com
art@flybynet.com
jftmat@peoplepc.com
nicholasthies@hotmail.com
adlergrp@yahoo.com

On behalf of:

The Shore Memorial Hospital, Atlantic County NJCEED Program
Donna Cericola, RN, BSN Administrative Director
Marge Scanny Atlantic County NJCEED Program Coordinator

Under the guidance of:

Stanley H. Weiss, MD, University of Medicine and Dentistry of New Jersey-New Jersey
Medical School (UMDNJ-NJMS) and School of Public Health (UMDNJ-SPH)
(Principal Investigator)
Marcia M. Sass, BSRN, MSN, ScD, UMDNJ-SPH
Susan L. Collini, MPH, UMDNJ-NJMS
Daniel M. Rosenblum, PhD, UMDNJ-NJMS
Judith B. Klotz, DrPH, UMDNJ-SPH



NEW JERSEY
MEDICAL SCHOOL
University of Medicine & Dentistry of New Jersey



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PUBLIC HEALTH
University of Medicine & Dentistry of New Jersey

With the assistance of:

- The UMDNJ Clinical Research Group – David L. Hom, MS, Loretta L. Morales, MPH, Benita Negron
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- The New Jersey Department of Health and Senior Services: the New Jersey Cancer Education and Early Detection Program, the New Jersey State Cancer Registry, and the Center for Health Statistics.

Reviewed and edited by:

Jung Y. Kim, MPH, UMDNJ-NJMS
Daniel M. Rosenblum, PhD, UMDNJ-NJMS
Stanley H. Weiss, MD, UMDNJ-NJMS and UMDNJ-SPH

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Atlantic County Cancer Capacity and Needs Assessment Report Summary

Introduction

The Office of Cancer Control and Prevention (OCCP) of the New Jersey Department of Health and Senior Services (NJDHSS), in conjunction with a mandate from the Governor's Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey (Task Force), is developing comprehensive capacity and needs assessment reports concerning cancer, individualized for each county in the state. This Report Summary highlights key findings in the Atlantic County report.

The Task Force released New Jersey's Comprehensive Cancer Control Plan (NJ-CCCP)¹ in 2002. Each county was commissioned to develop a comprehensive capacity and needs assessment report, as part of the initial implementation steps for the NJ-CCCP. The Report and this Report Summary were developed under the direction of the University of Medicine and Dentistry of New Jersey (UMDNJ) and the Evaluation Committee of the Task Force, in furtherance of the NJ-CCCP, which can be found at: http://www.state.nj.us/health/ccp/ccp_plan.htm. This particular assessment was funded by the OCCP through the following New Jersey Cancer Education and Early Detection (NJCEED) agency in Atlantic County: Shore Memorial Hospital.

The purpose of the capacity and needs assessment reports is to identify the major cancer issues affecting each county and the county's available resources, or lack thereof, for cancer prevention, screening, and treatment, and to propose recommendations for improvement. The Atlantic County Cancer Capacity and Needs Assessment Report² analyzes the population demographics and the cancer incidence and mortality rates and distribution of stage at diagnosis for the seven priority cancers of the NJ-CCCP (breast, cervical, colorectal, lung, oral, melanoma, and prostate), as well as the current resources available, in the county. These data guided the development of evidence-based recommendations and interventions to address cancer control priorities at local and state levels.

Section 1 – County Demographic Profile

Atlantic County is located in southern New Jersey and has both shore and inland communities. It is comprised of 23 municipalities covering 561 square miles, making it the 3rd largest county in New Jersey based on size. In 2000, the population of Atlantic County was 252,552 (15th highest of 21 counties). It is comprised of 48% males and 52% females, and the median age is 37.0 years, slightly higher than that of New Jersey (36.7).^{a,3,4}

^a In general, percentages in this report are rounded to two digits.

The residents of Atlantic County represent an average aging population. In the year 2000, Atlantic County was home to 34,437 senior citizens (aged 65 years old and older). At 13.6% of the county population, the senior population is comparable to New Jersey's 13.2% senior population. Approximately 112,906 people in Atlantic County (52,188 men and 60,718 women) were aged 40 and over.⁴

Based on figures from the 2000 U.S. Census, the racial/ethnic composition of Atlantic County differed from that of New Jersey as a whole:^{4,5}

- A smaller segment of the county population was white compared to New Jersey (68% versus 73%).
- A larger segment of the county population was black compared to New Jersey (18% versus 14%), with the largest concentrations of blacks found in Atlantic City, Pleasantville, and Hamilton Township.
- A slightly smaller segment of the county population was Hispanic^b compared to New Jersey (12% versus 13%), with the largest concentrations of Hispanics found in Atlantic City, Egg Harbor City, Buena, and Pleasantville.
- The presence of ethnic groups in the county expanded during the 1990s: the number of Chinese (up 129%), Filipinos (up 118%), and Vietnamese (up 205%) more than doubled, and the number of Mexicans more than quadrupled (up 401%). Of the county's Asian population (12,771), the Asian Indian population (3,371) represented the largest subpopulation, and of the county's Hispanic population (30,729), the Puerto Rican population (14,580) represented the largest subpopulation in 2000.

In Atlantic County 80% of the population aged 5 years and older spoke only English at home and 20% spoke a language other than English at home. The Atlantic Cape May Workforce Investment Board Strategic Plan for Adult Literacy estimates that 21% of the adult population in Atlantic County, or approximately 39,600 individuals, is at Level 1 literacy, with Atlantic City alone estimated to have 12,000 individuals at that level.⁶ Level 1 literacy is described as an individual with minimal or no reading or writing skills in any language and little or no comprehension of written language or how print corresponds to spoken language. Atlantic County also has approximately 4,705 linguistically isolated households, with 1,940 (over 40%) of those households in Atlantic City.^{c,4}

The following income measures were lower in Atlantic County than in the state in 1999:^{d,4}

- Median household income (Atlantic \$43,933 versus New Jersey \$55,146)
- Median family income (\$51,710 versus \$65,370)
- Per capita income (\$21,034 versus \$27,006).

^b Hispanics and non-Hispanics may be of any race. Racial categories include both Hispanics and non-Hispanics.

^c A linguistically isolated household is one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "very well". In other words, all members 14 years old and over have at least some difficulty with English.

^d All figures for poverty, income, and employment are from the 2000 Census, but refer to the year 1999.

Atlantic County also had a higher unemployment rate than New Jersey (4.8% and 3.7%, respectively) and a much higher percentage of the population employed by the arts, entertainment, recreation, accommodation, and food service industries than was true for New Jersey as a whole (32.1% versus 6.9%).^e Atlantic County had a higher percentage of families below the federal poverty level than New Jersey (7.6% versus 6.3%). Atlantic City (19.1%), Pleasantville (12.2%), Buena (11.8%), and Egg Harbor City (11.7%) had some of the highest percentages of families below the poverty level in their respective municipalities.⁴

Compared to New Jersey, Atlantic County had greater educational attainment at the high school level (35% versus 29% of the total population aged 25 and over) but lower educational attainment at the post-high-school level (44% versus 53%). The county was consistent with New Jersey relative to populations that attained less than or equal to 8th grade (6.5% versus 6.6%); however, municipalities in which the percentages were higher than the county's overall percentage are of specific concern. These municipalities are Atlantic City (12%), Buena (17%), Buena Vista Township (9.7%), Egg Harbor City (8.5%), Hammonton (12%), Mullica Township (9.9%), Pleasantville (7.5%), and Ventnor (6.7%).⁴

Atlantic County had a comparable birth rate, a higher infant mortality rate, and a higher death rate than did New Jersey in 2000:⁷

- Birth rates in Atlantic County were 13.5 versus 13.7 per 1,000 in New Jersey.
- Infant mortality rates were 10.5 versus 6.3 per 100,000 in New Jersey.
- Death rates due to all causes (all ages) were 955.5 versus 852.4 per 100,000.

Section 2 – Overview of Overarching Issues

Cancer-related services are scattered throughout the county. However, the majority of medical services are concentrated in Atlantic City, Somers Point, Galloway Township, and Hammonton, as well as in Egg Harbor Township and Mays Landing. The four hospitals in the county are Atlantic City Medical Center–City Division (Atlantic City), Shore Memorial Hospital (Somers Point), Atlantic City Medical Center–Mainland Division (Galloway Township), and William B. Kessler Memorial Hospital (Hammonton). Most residents can reach a hospital within 20 minutes or less. Some residents in the western portion of the county may seek medical care outside of the county, as the distances to out-of-county facilities may be equal to or less than those to county facilities. These out-of-county facilities include those in Cumberland and Camden counties.⁸

Detailed information regarding cancer screening, education, advocacy, treatment, palliation, and other activities has been collected to identify resources currently available in Atlantic County. This information was included in the statewide Cancer Resource Database of New Jersey (CRDNJ). Over 70 agencies, healthcare providers, community organizations, schools, employers, health departments, and faith-based organizations in Atlantic County participated in the CRDNJ survey during 2003–2004.^{f,9}

^e Unemployment rate is based on the population 16 years or older in the civilian labor force.⁴

^f Data collection for the Cancer Resource Database of New Jersey was performed utilizing standardized forms, referred to as “TELEform surveys,” which were generated from TELEform™ software.

Health Insurance

Detailed information documenting the number of people lacking health insurance is not available on the county level. Estimates of the number of uninsured people in Atlantic County, based on statewide percentages, vary from 30,000 to 35,000. This estimate may be on the low side because income levels in Atlantic County are lower than in New Jersey as a whole. Other possible influences include lower educational attainment, higher unemployment, and seasonal summer work in the county.^{10,11}

Without health insurance, access to healthcare may be diminished, which may result in cancer diagnoses occurring at a later stage in the progress of the disease, ultimately leading to higher morbidity and mortality rates. Atlantic County does have some options for uninsured patients needing health care, as well as agencies in the community to provide educational and emotional support and referral services. Some examples of these agencies are below:¹²

- The *American Cancer Society* (ACS), a non-profit organization, has an office in Absecon, New Jersey, and provides free education and support for those diagnosed with cancer. The ACS maintains a useful web site, and county residents and providers have access to the ACS's national call center^g (1-800-ACS-2345 ext. 1).¹³
- *Gilda's Club South Jersey*, a nonprofit organization located in Atlantic City, provides social and emotional support to women and men of all ages, and all race/ethnicity groups at no cost. Cancer education, information, activities, counseling (including nutritional counseling), support groups, family planning, and relaxation and imagery are some of the services offered.
- *NJCEED Program*, administered by Shore Memorial Hospital and a NJCEED coalition, focuses on outreach, education, screening, tracking, and follow-up for uninsured and underinsured women and men, who have income at or below 250% of the federal poverty level. Screening for breast (women and symptomatic men), cervical, colorectal (women and men), and prostate cancer is covered for the eligible population through this program.
- *Reliance Medical Centers*, with locations in Atlantic City, Pleasantville, and Galloway Township, provide adult and family medical care, obstetrics and gynecology services, pediatric medical care, and nutrition counseling. They accept Medicare, Medicaid, and private insurance. The Atlantic City office also accepts payment on a sliding scale based on the patient's income.
- *Southern Jersey Family Medical Centers, Inc.* are federally qualified health centers, providing medical and dental services to residents of Atlantic and Salem Counties. Anyone needing healthcare services is eligible.
- *South Jersey Cancer Fund*, a charitable non-profit organization, provides funding for any person with cancer who needs financial assistance for a variety of expenses.

^g The national call center takes 1.2 million calls per year. See http://www.cancer.org/docroot/ESN/content/ESN_3_1X_ACS_National_Cancer_Information_Center.asp?sitearea=ESN (accessed 22 September 2004).

(Please refer to the full Capacity and Needs Assessment report, Section Two – Resources,² for further examples.)

Education

Atlantic County has 26 public school districts and five charter schools for a total of 78 schools, not including private schools.¹⁴ State law requires the teaching of health, safety, physical education, alcohol and drug use, sex education, and breast self-examination (after 7th grade).¹⁵ The Atlantic County Education Department confirms that, “all the school districts have written plans or procedures to ensure that they comply with state health requirements.”¹⁶ All schools teach health in some capacity; however, there is no standard curriculum or mandated time dedicated to the subjects. Avoidance of smoking, alcohol use, and drug use in all grade levels is a high priority. Although schools varied, most schools do teach nutritional information in a variety of grades, and many schools do teach about cancer. Some schools, generally high school or middle school, touch on cancer as a specific topic, whereas others only mention cancer as a risk associated with poor behavior choices. One such example is skin cancer, which is a risk associated with the behavior of not using the appropriate cover or sunscreen.¹²

Palliative Care

Identifying appropriate palliative care services can be even more complex than locating the best resources for initial diagnosis and treatment. Patients and families need assistance in locating the specific services and funding to meet their comprehensive needs. Based on the patient’s preference, hospice services can be provided by Atlantic City Medical Center Hospice, Compassionate Care, or Holy Redeemer Visiting Nurse Agency–Hospice. All three of these agencies provide home hospice and bereavement services for Atlantic County. Pain management is available through both hospices and hospitals. Atlantic County does not have a freestanding hospice center. Other support groups are available at the American Cancer Society, Atlantic City Medical Center, Shore Memorial Hospital, and some of the faith-based organizations. Additional support groups and support services and activities are also available at Gilda’s Club in Atlantic City.¹²

Nutrition and Physical Activity

Some link has been established between nutrition, physical activity, and cancer, although the exact extent of the connection is still unknown. Approximately one-third of all cancers might be attributed to diet.¹⁷ Weight control and obesity are growing concerns across the nation. Reliable obesity statistics specific for Atlantic County are not currently available. However, 2000 Behavioral Risk Factor Surveillance System (BRFSS) data estimate that approximately 37% of New Jersey adults (aged 18 and older) are overweight and 18% of adults are obese.^{h,18} Applying these statewide percentages to Atlantic County would suggest that there are approximately 69,000 overweight and 33,000 obese adults in Atlantic County.¹⁹

^h Overweight is defined as a Body Mass Index (BMI) between 25.0 and 29.9, using current standards. Obesity is defined as a BMI of 30.0 or greater. BMI is calculated by multiplying the weight (in pounds) by 703, then dividing the result by the square of the height (in inches).

Childhood Cancers

Atlantic County does not have the necessary resources to serve children with cancer. Several factors account for the lack of pediatric cancer services in the county:

- Pediatric oncology is a specialized cancer field.
- Pediatric cancer care is often believed by the public to be better suited to major cities, where facilities are specialized and a greater number of patients with cancer may be treated more regularly.
- Atlantic County may lack a sufficient number of children with cancer to warrant a dedicated pediatric cancer facility. Children generally go to Philadelphia for treatment, with a travel time of about one hour.

Advocacy

Very little advocacy activity is conducted on the local level in Atlantic County. Most advocacy initiatives focus on smoking ordinances or take place at the state level. Efforts are needed to impact state legislation that will ultimately affect each county by providing resources or mandating levels of care for residents. Some examples of cancer advocacy efforts are the New Jersey Breast and Cervical Cancer Treatment Act (NJCEED Programs); requirements for private insurance coverage for prostate cancer screenings, mammograms, and Papanicolaou (“Pap”) tests; and the “Conquer Cancer” license plates fundraising efforts.^{20,21}

Section 3 – Cancer Burden

All incidence²² and mortality²³ rates cited herein are per 100,000 and are age-adjusted to the 2000 U.S. population standard²⁴. All county and state rates are average annual rates based during 1996–2000. For simplicity, the 1996–2000 average annual age-adjusted incidence or mortality rate herein will be abbreviated and referred to as incidence or mortality rate, respectively. The reason the five-year average has been routinely used is that the small number of cases in a single year leads to statistical variations that are not generally meaningful. For U.S. incidence rates, 1999 or 2000 rates were used. Unless otherwise specified, all rates are for invasive cancer only.

Overall Burden of Cancer in Atlantic County

Cancer has a considerable impact in Atlantic County. Men and women in Atlantic County had the 14th and 6th highest overall cancer incidence rates (all sites combined) of New Jersey’s 21 counties, respectively. On average, 694 men and 678 women were diagnosed with cancer each year during the period 1996–2000. The overall cancer incidence rates in Atlantic County were lower for men and higher for women than for the state.²² The incidence rates per 100,000 were as follows:

- Men: 619.0 in the county versus 628.7 in the state
- Women: 465.4 in the county versus 453.7 in the state

Atlantic County overall cancer incidence rates were lower than those of New Jersey for men in all race and ethnic categories for which separate data were availableⁱ except for black men. Black men had a considerably higher overall cancer incidence rate than did white men. The incidence rates per 100,000 were:

- White men: 603.3 (county) versus 625.2 (state)
- Black men: 740.6 (county) versus 716.5 (state)
- Hispanic^j men: 512.7 (county) versus 539.1 (state)

Atlantic County overall cancer incidence rates were higher than those in New Jersey for women in all available race and ethnic categories. White women had a higher rate than did black women. The incidence rates per 100,000 were:

- White women: 476.4 (county) versus 464.9 (state)
- Black women: 435.5 (county) versus 414.2 (state)
- Hispanic^j women: 428.1 (county) versus 363.8 (state)

The overall cancer mortality rates for men and women in Atlantic County were higher than those in the state. The mortality rates per 100,000 were:

- Men: 271.7 (county) versus 261.4 (state)
- Women: 192.8 (county) versus 181.7 (state)

The overall cancer mortality rates for white men and Hispanic men in Atlantic County differed only slightly from the corresponding state rates; however, black men in the county had a higher mortality rate than black men in the state and a considerably higher rate than white men in the county. The mortality rates per 100,000 were:

- White men: 258.2 (county) versus 256.7 (state)
- Black men: 378.2 (county) versus 349.8 (state)
- Hispanic men: 147.2 (county) versus 150.5 (state)

Both white and black women in Atlantic County had higher overall cancer mortality rates than was true for the state as a whole, while the county rate for Hispanic women was lower than in the state. In Atlantic County, black women had a higher cancer mortality rate than did white women. The mortality rates per 100,000 were:

- White women: 190.2 (county) versus 182.1 (state)
- Black women: 224.4 (county) versus 203.0 (state)
- Hispanic women: 79.4 (county) versus 92.9 (state)

ⁱ Separate data were collected for whites and blacks and for those of Hispanic ethnicity (of any race). Other minority groups raise special issues as well, related to culture, language, and access to care. Although there are concerns that minorities bear disproportionate portions of the cancer burden, their limited numbers lead to their omission from many sources of statistical data. Thus, precise numbers and rates are not readily available and are not portrayed explicitly.

^j Hispanics and non-Hispanics may be of any race. Racial categories include both Hispanics and non-Hispanics. Data on non-Hispanics are not available. Comparisons of Hispanic rates with rates for the whole population may underestimate the difference between Hispanics and non-Hispanics because Hispanics are included in the total population.

Breast, colorectal, lung, and prostate cancers affect the most people in Atlantic County. Age is a major risk factor. Cancer incidence and mortality rates rise dramatically by age, and men are generally at higher risk than women.^{22,23}

Summary of Selected^a Age-Adjusted^b Atlantic County Cancer Statistics, 1996–2000^c

	Estimated Prevalence ^d	Incidence per 100,000 ^e	Mortality per 100,000 ^e
All Cancers,^f Atlantic County			
Male	3,859	619.0	271.4
Female	5,978	465.4	192.7
NJ-CCCP Priority Cancer by Gender			
Breast, female	2,051	127.4	31.8
Cervical, female	387	16.9	3.7
Colorectal, male	451	75.0	29.6
Colorectal, female	733	60.9	22.1
Lung, male	162	101.6	81.8
Lung, female	211	64.5	44.9
Melanoma, male	175	15.0	4.7
Melanoma, female	274	11.8	2.9
Oral/Oropharyngeal, male	156	20.8	3.8
Oral/Oropharyngeal, female	103	8.1	1.3
Prostate, male	1,470	177.6	30.9

^a Based upon the NJ-CCCP.

^b Age-adjusted to 2000 U.S. Census population standards. Age-adjustment is used to describe rates in which statistical procedures have been applied to remove the effect of differences in composition (specifically, variations in age distribution) of the various populations. This is important in order to portray an accurate picture of the burden of cancer, since cancer is known to disproportionately affect persons of differing ages.

^c Rates are average annual rates during the time period 1996 through 2000.

^d Prevalence is the measurement of burden of disease in the population at a particular point in time. Within this report, it represents the number of people alive who have ever been diagnosed with the disease. Prevalence figures given here are rough theoretical estimates, based on a number of assumptions, and computed by applying national prevalence-to-incidence ratios to Atlantic County's average annual crude incidence counts for the five years 1996–2000, separately for each gender. Actual prevalence is likely to be of the same order of magnitude as the estimate.²⁵

^e Incidence and mortality are gender-specific, age-adjusted annual rates, not counts. A rate at least 10% higher than the corresponding state rate is shown in bold italics.

^f “All cancers” represents the sum of all invasive cancer during the time period, not just the seven cancers presented in detail below.

Cancer Burden By Site

Breast Cancer

The incidence rate of breast cancer was 8% lower in Atlantic County than in New Jersey (127.4 versus 138.5 per 100,000 for county and state, respectively). The breast cancer mortality rate in Atlantic County was consistent with the rate in New Jersey (31.8 versus 31.3 per 100,000). In Atlantic County, white women had a 39% higher breast cancer incidence rate (135.7 per 100,000) than did black women (97.8). However, the mortality rate for this disease among black

women (35.5 per 100,000) was 10% higher than among white women (32.2). Among Hispanic women, the breast cancer incidence rate was 101.4 per 100,000, and the mortality rate was suppressed due to small counts. The distribution of breast cancer by stage at diagnosis was consistent with that of New Jersey, and the population of focus is women of all races aged 40 and over.

Early diagnosis of breast cancer, through regular use of mammography, appears to reduce mortality from the disease. “Randomized clinical trials have demonstrated a 30% reduction in breast cancer mortality in women aged 50 to 69 years who are screened annually or biennially with mammograms.”²⁶ The reduction in breast cancer mortality through regular screening is about 17% for women aged 40 to 50.²⁶ This evidence suggests that increasing the percentage of early-stage diagnoses may reduce the mortality rate, emphasizing the importance of educating women and providers about the need for early screening and mammography.

Among 3,923 New Jersey women aged 50 and over who were interviewed from 2000 through 2002, 78% reported having had a mammogram within the past two years.^{27,28} The rate for Atlantic County did not differ significantly from the state rate, but only 101 women within the county were interviewed.²⁸ As there are 40,468 women aged 50 and over in the county, the BRFSS data suggest approximately 15,700 mammograms per year were conducted in this age group alone.

The population of focus for breast cancer in Atlantic County is women of all races aged 40 and over, because incidence rates increase as women age. Women aged 40 and over represented 47% of all females in Atlantic County and 24% of the county’s total population (60,718 women), according to the 2000 U.S. Census.⁴

Based on the demographic analysis, Atlantic County had a higher percentage of families below poverty level in 1999 than did the state (7.6% compared to 6.3%). These statistics are important because women living in poverty may not have the financial resources to seek breast cancer screening or appropriate follow-up treatment. Also, women who bear a high level of household responsibility as female head of household with no father figure present may find that their financial and social circumstances prevent attention to healthcare concerns. Five municipalities in the county exceeded the state (19.4%) and the county (19.7%) percentages of families with female head of household and no father figure present. These municipalities are Atlantic City (30.9%), Estell Manor (29.8%), Egg Harbor City (28.1%), Buena Vista Township (21.8%), and Buena (20.3%).²⁹ An attempt to outreach to these women should be initiated.

Additional outreach efforts are necessary for all women of the appropriate age. This is especially true for black women, who experience a higher mortality rate than white women. Women with specific unhealthy lifestyles such as high-fat diets and lack of physical exercise, as well as women using oral contraceptives long term or starting at an early age or using hormone replacement therapy long term, may be at increased risk, and consequently should be a focal point.³⁰

Cervical Cancer

The cervical cancer incidence rate was 55% higher in Atlantic County (16.9 per 100,000) than in New Jersey as a whole (10.9). The mortality rate for cervical cancer was 19% higher in Atlantic County (3.7 per 100,000) than in New Jersey (3.1). Hispanic women had a high incidence rate of cervical cancer (38.2 per 100,000). Black women (23.9 per 100,000) had a 55% higher incidence rate than did white women (15.4). The mortality rate for white women was 3.3 per 100,000, but the rates for black and Hispanic women were suppressed because of the small number of cases. The distribution by stage at diagnosis was consistent with that of the state. Atlantic County (18.4%) had a higher percentage of unstaged cases than did New Jersey (13.5%) and the U.S. (6.6%). More than one-fourth of cases in black women in Atlantic County were unstaged. The population of focus is women of all races aged 18 and over. Women aged 40 and over represent a special focus.

Among 7,689 New Jersey women with no history of hysterectomy who were interviewed from 2000 through 2002, 83% reported having had a Pap smear within the past three years.^{27,28} The rate for Atlantic County did not differ significantly from the state rate, but only 190 women within the county were interviewed.²⁸

A recent New Jersey study identified several factors affecting the decision not to obtain a Pap test including lack of awareness of risk factors, cost, feelings of embarrassment, discomfort related to the Pap test, and beliefs that older women do not contract cervical cancer.³¹ A New Jersey Hospital Association report identified the following barriers for women: hassles with the healthcare system, lack of personal priority placed on prevention, inconvenience or lack of services, language, transportation, childcare, and cultural sensitivity.³² The NJ-CCCP Cervical Cancer Workgroup recommends increasing public awareness and education to all women through outreach programs. The target audiences should be women at high risk, such as women who are sexually active, are obese, or smoke, as well as school-age young women. The Workgroup also recommended educating patients and healthcare professionals about cervical cancer, risk factors, screening guidelines, and follow-up and treatment options.³³

The population of greatest concern for cervical cancer is women of all races aged 18 and over. In 2000, women in this age group represented 39% of the total population (99,210 women) in Atlantic County. Atlantic City, Brigantine, Egg Harbor Township, Galloway Township, Hamilton Township, Hammonton, Pleasantville, and Ventnor City are municipalities with populations of more than 5,000 women aged 18 and over.³⁴

Women aged 40 and over should be the focus of special outreach efforts because they are more often diagnosed at a later stage. Women in this age group represented 47% of all females in Atlantic County and 24% of the county's total population (60,718 women).⁴ Based on the demographic analysis, Atlantic County had a higher percentage of families below poverty level than did the state (7.6% compared to 6.3%). It was also determined that five municipalities in the county exceeded the state (19.4%) and the county (19.7%) percentages of families with female head of household and no father figure present. These municipalities are Atlantic City (30.9%), Estell Manor (29.8%), Egg Harbor City (28.1%), Buena Vista Township (21.8%), and Buena (20.3%).²⁹ As stated earlier, women who bear a high level of household responsibility and women living in poverty may not have the financial resources to seek screening or appropriate

follow-up treatment for cervical cancer. An attempt to outreach to these women should be initiated.

Minority women are another population of focus because of their increased incidence rates and late staging data. Cervical cancer occurs most often among minority women, particularly Asian-American (Vietnamese and Korean), Alaska Native, and Hispanic women, as well as among older women, uninsured women, poor women, and women living in rural areas.^{1,35} Given the growing multi-cultural segments of the Atlantic County population, increased screening activities must be focused in these areas. According to the 2000 U.S. Census, the county's Asian population nearly tripled since 1990, accounting for 5.1% of the population (12,771 persons) in 2000 compared to 2.1% in 1990; 12.2% of the population of the county (30,729 persons) is Hispanic.²⁹

Other risk factors include women who had an early onset of sexual intercourse, have a history of multiple partners, have a history of sexually transmitted disease, especially human papillomavirus (HPV) and human immunodeficiency virus (HIV), obesity, and smoking.¹ HPV is the most important risk factor for cervical cancer; recommendations for the incorporation of HPV testing^k as part of a pelvic examination have been developed by the American College of Obstetricians and Gynecologists.^{1,36}

Colorectal Cancer

Compared to New Jersey, the colorectal cancer incidence rates in Atlantic County were 5% lower among men (75.0 versus 79.0 per 100,000 for county and state, respectively) and 12% higher among women (60.9 versus 54.4 per 100,000 for county and state, respectively). The mortality rates for colorectal cancer were consistent for men (29.6 per 100,000 in the county, 29.5 in the state) and 10% higher for women (22.1 per 100,000 in the county, 20.1 in the state).

Among men, white men in the county had a colorectal cancer incidence rate 10% higher than that for black men (76.0 versus 68.8 per 100,000 for white men and black men, respectively). The corresponding incidence rate among Hispanic men was 26.8 per 100,000. Among women, black women in the county had a colorectal cancer incidence rate (73.2 per 100,000) that was 23% higher than that of white women in the county (59.4) and 29% higher than that of black women in the state (56.6). Although annual colorectal cancer incidence rates among men in the county have decreased slightly during the 5-year period 1996–2000, rates among women in the county have remained stable during the same period. Black men (39.3 per 100,000) and black women (26.3) in the county had higher mortality rates for colorectal cancer than did white men (27.9) and white women (21.8), respectively. The corresponding mortality rates for Hispanic men and women in the county were suppressed due to small counts. Diagnosis occurred more frequently in the early stages in the county than in the state among both men and women. The populations of focus for colorectal cancer are men and women of all races aged 50 and over. Other special populations of focus are female and black populations.

^k For example, the ViraPap™ will detect which strains of HPV DNA, if any, are present.

Percentages for colorectal screening are often low. Among 4,961 New Jersey adults aged 50 and over who were interviewed from 2001 through 2002, 56% reported having had colorectal cancer screening (either a fecal occult blood test within the past year or a sigmoidoscopy or colonoscopy ever).^{27,28} The rate for Atlantic County did not differ significantly from the state rate, but only 124 adults within the county were interviewed.²⁸ The NJ-CCCP has identified several possible reasons for low screening percentages (40%–50% range) in the New Jersey population aged 50 and over. These include lack of understanding about the tests and recommended screening schedule, discomfort with the subjects of cancer and colorectal screening, concerns that the tests cause pain, and lack of discussion with a physician. Healthcare providers cite inadequate training and experience regarding colorectal screening, a lack of time to discuss the subject with patients, and some concern about the efficacy of the test. Inadequate reimbursement, high costs, and limited access to screening facilities have also been cited as reasons these tests are not performed as often as recommended.³⁷

Colorectal cancer is highly curable, with a 90% five-year survival rate when detected in the early stages. However, only 37% of new cases in New Jersey are diagnosed in the localized stage.^{1,37} For this reason, the NJ-CCCP Colorectal Workgroup identified education and public awareness as important goals in reducing mortality and improving survivorship for colorectal cancer. Increased awareness may result in increasing the number of early diagnoses, and consequently a higher likelihood of survival.³⁸

The populations of greatest concern for colorectal cancer are men and women of all races aged 50 and over. Incidence and mortality rates for the disease both increase with age. In 2000, people aged 50 and over represented 29% of the total population (72,812 persons) in Atlantic County. Atlantic City, Brigantine, Egg Harbor Township, Galloway Township, Hamilton Township, Hammonton, Margate City, Pleasantville, and Ventnor City had a higher concentration (4000+) of men and women aged 50 and over.³⁴

A variety of groups should be the focus of special attention for colorectal cancer prevention and control activities.

- Women in Atlantic County had the highest incidence rate of colorectal cancer in New Jersey, and black women in Atlantic County had the highest incidence rate among black women in New Jersey. Also black men and women had the highest colorectal cancer mortality rates in the county (of groups for which separate statistics were collected). Atlantic City and Pleasantville are the two Atlantic County municipalities with the highest number of black men and women. Approximately 58% of Pleasantville's population and 44% of Atlantic City's population are black.⁴
- The high percentage of the population at Level 1 literacy, reflecting individuals with minimal or no reading or writing skills in any language, and little or no comprehension of written language or how print corresponds to spoken language, may present a barrier to accessing healthcare in the county. This may affect some county residents' ability to read written communications about colorectal cancer screening locations or the importance of getting early screenings, as well as follow-up treatment recommendations. In Pleasantville, approximately 36% of the population is at Level 1 literacy; in Atlantic City 40% of the population is at this level.^{6,39}

- Men and women with specific unhealthy lifestyles such as diets high in fat and animal sources, physical inactivity, smoking, and high alcohol intake, as well as a family history of colorectal cancer are also at increased risk and represent groups for special focus.^{1,40}
- People with diabetes may have a 30% to 40% increased chance of developing colon cancer, as well as a higher death rate after diagnosis.^{1,41}

Lung Cancer

The lung cancer incidence rates in Atlantic County were 10% higher than the corresponding rates for New Jersey among men (101.6 versus 92.5 per 100,000 in county and state, respectively) and 16% higher among women (64.5 versus 55.4 in county and state, respectively). Lung cancer mortality rates for both men and women were also higher in Atlantic County than in New Jersey (for men: 81.8 per 100,000 in the county versus 74.9 in the state; and for women: 44.9 in the county versus 41.6 in the state). In Atlantic County, black men (115.2 per 100,000) had a 15% higher incidence rate of lung cancer than did white men (100.4). The same pattern occurred among women: black women (67.3 per 100,000) had a 4% higher incidence rate of lung cancer than did white women (64.6). The lung cancer incidence rate among Hispanic men in the county was 94.2 per 100,000 and 58.5 among Hispanic women. Black populations also have higher mortality rates for this disease than do white populations: the mortality rate was 38% higher among black men (109.9 per 100,000) than among white men (79.4) in the county, and 3% higher among black women (46.6) than white women (45.1). Stage at diagnosis is not available for lung cancer because it can seldom be diagnosed in the early stages. The populations of focus are men and women who smoke, as well as children and young adults for antismoking educational efforts.

The populations of greatest concern for lung cancer are men and women in the county who smoke. Almost 9 out of 10, or 87%, of all lung cancer cases result from tobacco smoking.^{1,42} Repeated exposure to carcinogens increases the chances of lung cancer, consequently incidence rates increase as men and women age, especially after age 50. In 2000, people aged 50 and over represented 29% of the total population (72,812 persons) in Atlantic County. Atlantic City, Brigantine, Egg Harbor Township, Galloway Township, Hamilton Township, Hammonton, Margate City, Pleasantville, and Ventnor City had a higher concentration (4000+) of people aged 50 and over in 2000.³⁴ BRFSS trend statistics for New Jersey indicate that in 2000, 21% of New Jersey adults smoked cigarettes; almost 21% of those in the 50–64 age group and 11% of those aged 65+ smoked.⁴³ Because this information is not available specifically for Atlantic County, it can be estimated that there are approximately 39,600 Atlantic County residents smoke and 11,670 Atlantic County residents aged 50 and over (or 4.6% of the population) who are at high risk for lung cancer.

Although lung cancer affects populations of all socioeconomic levels, men and women with less education and lower incomes are more likely to smoke. BRFSS data for New Jersey indicate that in 2002, 27% of adults with household income less than \$15,000 per year smoked compared to

¹ In 2003, Health and Human Services Secretary Tommy G. Thompson announced that the number of Americans with diabetes rose to an all-time high, estimated at 18.2 million. “These new estimates show we are diagnosing more people who live with diabetes, and the overall prevalence of this disease continues to increase.”⁴¹

18% of adults with household income \$50,000+ per year.²⁷ Also, 27% of New Jersey adults with less than a high school education smoked compared to 12% of college graduates.²⁷ Another important population relative to smoking is young people, especially teenagers. It has been demonstrated that repeated exposure to smoke over time increases the risk for lung cancer. It is clear that lung cancer is largely preventable so the goal should be to prevent people from starting to smoke. Current smokers and children and young adults are therefore populations of focus. Exposure to environmental tobacco smoke (ETS), or “second-hand” smoke, remains an additional important issue.⁴⁴

Lastly, Atlantic County’s work environment may increase county residents’ exposure to smoke and other carcinogens. As a result, the following populations may be at increased risk:³⁰

- Workers in industries such as resort/restaurant establishments exposed to ETS.
- People employed by industries or populations living close to local and interurban passenger transit, auto repair, or parking services exposed to carcinogens such as diesel exhaust.
- Asbestos workers employed in the ship-building industry or construction workers, firefighters, or asbestos abatement workers working in older homes in the county.

The extent to which the county population is specifically affected in these areas is unknown and requires further study.

Melanoma

In Atlantic County, the melanoma incidence rate was lower than the corresponding New Jersey rate among men (15.0 versus 20.1 per 100,000 for county and state, respectively) and consistent with the state rate among women (11.8 versus 11.9 for county and state, respectively). The mortality rates for melanoma were slightly higher in Atlantic County than in New Jersey as a whole (for men: 4.7 per 100,000 in the county versus 4.4 in the state; and for women: 2.9 in the county versus 1.9 in the state). In Atlantic County, the melanoma incidence rate was 17.8 per 100,000 among white men and 14.1 among white women, and the mortality rate was 5.2 per 100,000 among white men and 3.6 among white women. The incidence and mortality rates for melanoma among the black and Hispanic populations were suppressed due to the small number of cases. Melanoma is generally diagnosed at a later stage in Atlantic County compared to New Jersey. The populations of focus are white men and women aged 50 and over, as well as younger age groups for emphasis on prevention.

The NJ-CCCP Melanoma Workgroup identified the need for early detection and screening to decrease both the incidence rates and the mortality rates for melanoma. Berwick et al. demonstrated that self-examination could decrease the incidence of invasive melanomas. Consequently, the workgroup has recommended the dissemination of information and education about prevention at public schools, worksites, recreation facilities, and healthcare facilities.⁴⁵

The population of greatest concern for melanoma is the white population. Melanoma incidence rates increase after age 50. Fair skin creates the highest risk of sun damage due to the lack of protective pigmentation.³⁰ Although the incidence rates for melanoma of the skin in both men

and women in Atlantic County are lower than in New Jersey and the United States, the mortality rates are higher, particularly among women. Stage at diagnosis appears to be later in the county, especially in the older age cohorts.

Despite the ease of preventing skin cancer, only a small percentage of people make the effort to protect themselves appropriately. According to the 1998 National Health Interview Survey, 27% of adults sought shade, 23% wore protective clothing, and 30% routinely used sunscreen.⁴⁶ The 1999 BRFSS estimated that 31% of New Jersey men and 22% of New Jersey women had a sunburn in the previous 12 months. In terms of age, responses showed that 40% of those aged 18–34 had a sunburn in the past year, a higher percentage than in any other age group.⁴⁷ Due to the long period of time between sun exposure and the development of skin cancer, children and those aged 18–34 should be considered an important population of focus.

It is difficult to identify the population of focus in Atlantic County at highest risk for melanoma because the risk affects much of the county. The vast majority of the county is white. Although the higher percentage of late-stage and unstaged cases in Atlantic County compared to the state is a concern, the overall number of people diagnosed with melanoma is small.

Oral/Oropharyngeal Cancer

The oral/oropharyngeal cancer incidence rate in Atlantic County was 32% higher than that in New Jersey among men (20.8 versus 15.7 per 100,000 for county and state, respectively) and 27% higher among women (8.1 versus 6.4 for county and state, respectively). The mortality rate for oral/oropharyngeal cancer among men in the county was lower than the state rate (3.8 per 100,000 in the county versus 4.2 in the state). The mortality rate for women in Atlantic County was suppressed due to the small number of deaths. The oral/oropharyngeal cancer incidence rate in the county was 24% higher among black men (25.4 per 100,000) than among white men (20.5), as was true for the state, where the incidence rate for black men (22.8) was also higher than that for white men (14.9). The county incidence rate for oral/oropharyngeal cancer among Hispanic men was 18.0 per 100,000. The pattern of disparities was different for women. In Atlantic County, white women had a 23% higher incidence rate of oral/oropharyngeal cancer (8.6 per 100,000) than did black women (7.0). The incidence rate for Hispanic women was suppressed, as were the oral/oropharyngeal cancer mortality rates for all race and ethnic categories for which separate data were available. Men in Atlantic County were more frequently diagnosed at the regional stage (59.5%) than were men in New Jersey (50.4%).

A dentist or doctor can screen for oral cancer during a physical examination. Approximately 81% of dentists indicated in a recent study that they perform oral cancer examinations for all patients aged 40 years and older, and 78% of dentists performed oral cancer examinations at recall appointments.⁴⁸ It is not clear whether dentists are screening properly. A detailed survey on procedures in the county and state would be necessary to document this issue.

The populations of focus are tobacco and heavy alcohol users, as well as younger age groups of the general population as a focus for prevention, as it has been documented that tobacco and heavy alcohol users are at highest risk. Approximately 90% of people with oral cancer used tobacco (smoked or chewed) and 75%–80% of all patients with oral cancer “drink a lot of

alcohol.”³⁰ The incidence rates of oral and oropharyngeal cancer increase with age, particularly for men aged 50 and over.

Prostate Cancer

Incidence rates for prostate cancer were 9% lower in Atlantic County than in New Jersey as a whole (177.6 per 100,000 in the county versus 194.3 in the state). The prostate cancer mortality rate was also slightly lower (6%) in the county than in New Jersey (30.9 versus 32.9 per 100,000 in the county and state, respectively). In Atlantic County, black men had a considerably higher prostate cancer incidence rate (262.7 per 100,000) than did white men (164.6). In addition, the mortality rate among black men in the county (55.8 per 100,000) was almost double the mortality rate among white men (28.2). Prostate cancer mortality rates for Hispanic men in the county were suppressed due to the small number of deaths. The distribution by stage at diagnosis for prostate cancer was consistent with that in New Jersey. The population of focus for this disease is men of all races aged 50 and over, especially black men.

Scientific consensus has not been reached on the effectiveness of prostate cancer screening because it is unclear whether screening reduces the mortality rate.⁴⁹ Although the Centers for Disease Control and Prevention does not recommend prostate cancer screening, it does recommend that men be provided with current information about screening, including the potential harms and benefits.⁵⁰ Many physicians do recommend screening for their patients and handle the decision to screen on a case-by-case basis. More studies and randomized trials are necessary to determine if early detection reduces mortality.

The population of greatest concern for prostate cancer is men of all races aged 50 and over, with a particular focus on black men. Incidence rates for prostate cancer increase after age 50 and were highest among the 65–74 age group. Among men of all races in Atlantic County, the prostate cancer mortality rate for those aged 50 and over was 111.5 per 100,000 and 222.2 for those aged 65 and over. In 2000, men aged 50 and over represented 12.8% of the total population (or 32,344 men) in Atlantic County. The distribution was 7.2% (18,310 men) in the 50–64 age group and 5.6% (14,034 men) aged 65 and over. Atlantic City, Brigantine, Egg Harbor Township, and Galloway Township had a higher concentration (2000+) of men aged 50 and over. In Atlantic County, black men represented 1.7% of the total population at risk for prostate cancer (4,193 black men aged 50 and over). A higher number of black men live in Atlantic City and Pleasantville. As noted in the section on colorectal cancer, Atlantic City and Pleasantville are the two municipalities with the highest population of black residents. In addition, also noted in greater detail in the colorectal cancer section, the high percentage of Level 1 literacy among the population of these two municipalities may be a barrier to accessing appropriate screening or treatment for prostate cancer.

Other Cancer Sites/Issues

HIV/AIDS. Human immunodeficiency virus (HIV) is the etiologic agent of the acquired immunodeficiency syndrome (AIDS) and is associated with the development of several specific

cancers.¹ In 2003, Atlantic County had the 5th highest prevalence rate of known HIV infection^m among all New Jersey counties (546.2 per 100,000 in the county versus 364.6 in the state).⁵¹ In Atlantic County, there were 1,417 persons living, known to be HIV positive, as of December 2003. Atlantic City represented 59% of the known HIV positive cases for the county.⁵¹ Both healthcare providers and patients need to understand the risks.

Bladder Cancer. New Jersey's bladder cancerⁿ incidence rates are higher than the nation for all race and ethnic categories.²³ Mortality due to bladder cancer was higher in New Jersey men than in the nation overall. For 2003, bladder cancer was estimated to be the 6th most common cause of cancer mortality in the U.S. and the 5th most common cause in New Jersey.⁵² Among males, the incidence rate of bladder cancer (47.0 per 100,000) was similar to that of the state (45.6),⁵³ while mortality²³ was 18% higher in the county (11.1 per 100,000) than in the state as a whole (9.4). Among females, both the incidence⁵³ and the mortality²³ of bladder cancer were higher in the county (incidence 13.2 per 100,000; mortality 2.9 per 100,000) than in the state (incidence 12.0; mortality 2.7).

Section 4 – Discussion, Analysis and Recommendations

Many local and statewide priorities are similar or are linked to one another. Some of the recommendations below follow the NJ-CCCP goals and objectives and are focused on cancer awareness, screening, early detection, and prevention/education.

Recommendations for County and Local Priorities

Based on concerns relevant to the county's demographics, available resources, and cancer burden, the following recommendations for cancer prevention and control have been identified as significant for Atlantic County:

- ✓ Expand the NJCEED Cancer Coalition within the county to address pressing cancer control and treatment issues and implement the New Jersey Comprehensive Cancer Control Plan. Concentrate on recruiting community leaders for this coalition who can reach out to high-risk populations.
- ✓ Concentrate on low literacy educational materials and develop more educational materials in the Spanish and Asian languages. Develop an educational campaign for the county about risk factors, early detection and screening, signs and symptoms, and prevention through media outlets and the cancer coalition.
- ✓ Educate students in school health classes about chronic diseases, specifically cancer, to facilitate a clear understanding of the importance of prevention, screening, and health insurance coverage, as well as nutrition and obesity issues.

^m Includes persons living with AIDS who may not have been tested for HIV. As the total does not include persons living with HIV who have not been tested, the totals include only an unknown portion of total infections.

ⁿ Invasive and *in situ* bladder cancers are both included in standard statistical tables. See "[United States Cancer Statistics: 2001 Incidence and Mortality Web-based Report](http://apps.nccd.cdc.gov/uscs/TableV.asp?group=1a&Year=2001&Gender=FEM&RateType=AgeadjType&TableType=INCI)" footnotes at <http://apps.nccd.cdc.gov/uscs/TableV.asp?group=1a&Year=2001&Gender=FEM&RateType=AgeadjType&TableType=INCI> - Footnotes

- ✓ Teach healthcare providers about the importance of discussing cancer screening with patients. Physician recommendations have been identified as the major motivator in encouraging individuals to seek cancer screening.
- ✓ Promote reduction of tobacco use to prevent lung and oral cancers, as well as other cancers. Smoking cessation programs should be advertised and continued with financial assistance for those in need. The Communities Against Tobacco (CAT) Coalition should be supported and strengthened to increase the number of public areas that are smoke free.
- ✓ Encourage relevant groups and individuals to press for the accomplishment of the *Healthy New Jersey 2010* goals. The county does not currently meet the goals and has a substantial task ahead to meet the objectives.

Recommendations for Specific Cancer Sites

Recommendations for individual cancer sites are listed below (references in parentheses are to relevant strategies outlined in the NJ-CCCP):

- ✓ **Breast Cancer.** Develop an educational promotion through the Atlantic County Cancer Coalition and lead agencies to create educational materials and generate enthusiasm within the community. Conduct events such as breast health clinics and screenings in October and May. Make health or treatment recommendations when appropriate especially for low-income, underserved, and uninsured women, as well as minority groups such as black women. Also develop educational interventions for healthcare professionals to stress the need for continued communication with patients to ensure they are not lost to follow-up and treatment. (BR-1 through BR-5)
- ✓ **Cervical Cancer.** Increase Pap test usage because cervical cancer is more easily treated in precancerous stages, especially in high-risk women. Although cervical cancer numbers are low, the county incidence rate was above that of New Jersey. Cervical cancer education can be conducted in conjunction with breast education to maximize resources and dollars spent. Focus is recommended on younger women (e.g., high school age), as well as on family practices, ob/gyn physicians, emergency rooms and family planning facilities. (CE-2)
- ✓ **Colorectal Cancer.** Develop an educational promotion through the Atlantic County Cancer Coalition and lead agencies to create educational materials and generate enthusiasm within the community. Conduct events such as colorectal health clinics and screenings and make health or treatment recommendations when appropriate, especially for low-income, underserved, and uninsured men and women, as well as minority groups such as black men and women. Also develop education for healthcare professionals to stress the need for and benefits of colorectal screening along with continued communication with patients to ensure they are not lost to follow-up and treatment. (CO-2)
- ✓ **Lung Cancer.** Promote joint efforts among the CAT Coalition, the Atlantic County Cancer Coalition and lead agencies to encourage smoking cessation, as well as participation in clinical trials. CAT Coalition activities should continue and be expanded due to the high rates of lung cancer in Atlantic County. Education efforts to physicians' offices, clinics, and emergency rooms should occur to inform their staff about the

importance of a physicians' motivational role in encouraging patients to quit. (LU-1, LU-2, LU-5)

- ✓ **Melanoma.** A campaign similar to “Whatever Skin You’re In, Choose Your Cover”^o to remind people of the sun’s dangers and methods for effective prevention and screening should be initiated by the Atlantic County Cancer Coalition and lead agencies prior to the summer season. The program could be “kicked off” with information in the local newspaper and broadcast on local radio stations. Literature should be available and information posted at stands where citizens purchase beach tags, stores where sunscreen is sold, physicians offices and hospitals, workplaces, stores, and recreation activities. The campaign could culminate each season with a screening clinic to teach people how to identify skin cancers. (ME-1, ME-4, ME-5, ME-6)
- ✓ **Oral/Oropharyngeal Cancer.** One way to increase awareness about this type of cancer is to add oral/oropharyngeal cancer information to existing literature and outreach efforts in the county. Education should promote the understanding of oral cancer as a risk from smoking, as well as lung cancer, emphysema, and heart disease. A second approach is to motivate physicians and dentists to raise awareness of oral cancer among their patients. These would be cost-effective ways to increase awareness of oral cancer, which affects only a small number of people in the county, despite the fact that the county incidence rate was higher than that of the state. (OR-1, OR-3, OR-4)
- ✓ **Prostate Cancer.** Develop an educational promotion through the Atlantic County Cancer Coalition and lead agencies to create educational materials and generate enthusiasm within the community. Engage specific community leaders, especially in the black community, to encourage men to participate in events such as June prostate/men’s health clinics. At these events providers can make screening recommendations when appropriate especially to low-income, underserved, and uninsured men. Also develop educational interventions for healthcare professionals to stress the need for continued communication with patients to ensure they are not lost to follow up and treatment. (PR-1, PR-2, PR-4)
- ✓ **HIV/AIDS.** Atlantic County was 5th highest in HIV/AIDS prevalence in the state in 2003 and has a higher rate than does New Jersey as a whole; therefore it is important for both healthcare providers and patients to understand the increased risk of cancer for HIV/AIDS patients. Cancer information should be added to HIV/AIDS literature to educate the community in general and to distribute materials through the school systems. The best way to control HIV-related cancer is to prevent HIV. Educational information should be available for all citizens, with special attention paid to the highest risk groups.
- ✓ **Bladder Cancer.** Although the actual number of persons affected by bladder cancer is small, Atlantic County’s bladder cancer incidence and mortality rates were among the state’s highest and should be monitored in the future. Information about the disease can be easily incorporated into other activities of the Atlantic Cancer Coalition. Bladder cancer risk information can be added to materials that are being developed or are already

^o Whatever Skin You’re In, Choose Your Cover” was launched by the NJDHSS and kicked off in Ocean City, New Jersey, in May 2003. This campaign was designed to remind the public about sun safety with posters and pamphlets distributed in high-impact areas such as parks, camps, and beaches, as well as schools around New Jersey. Billboards were also placed in every county in the state.

in the community. Materials about the signs and symptoms of bladder cancer should be available at men's health clinics.

Recommendations for Statewide Priorities

While many action recommendations affect county residents, most concerns are consistent with statewide issues. The following targets are a priority:

- ✓ The New Jersey Cancer Education and Early Detection (NJCEED) program represents an important initial step in providing services for the underinsured and underserved. However, the program works under a number of constraints:
 - Screening for colorectal and prostate cancer is currently covered under NJCEED, although no funds are available for treatment if cancer is diagnosed. The NJCEED County Project Coordinator must identify facilities to provide free services for affected individuals. If breast or cervical cancer is diagnosed, the patient may qualify for Medicaid; this eligibility should be extended to NJCEED colorectal and prostate cancer patients as well.
 - The NJCEED program is still not widely known despite having been initiated in 1997. Education about the services and programs and outreach are essential for both citizens and professionals. A statewide media campaign could increase this awareness. Advertising the local NJCEED programs together through a statewide campaign would maximize resources and jumpstart the local campaigns.
 - The NJCEED program currently does not cover lung cancer, oral cancer, or melanoma. In fact, no programs, other than charity care, currently support the uninsured or underinsured for lung cancer, oral cancer, or melanoma.
- ✓ The uninsured and underinsured populations need options through which to obtain affordable health insurance. A state-funded program could fully or partially support insurance at a reduced rate for people with low-incomes, perhaps in concert with private health insurance companies. Another option might be a program to insure only serious illness, with local clinics providing primary care. Additional facilities/clinics are needed to specifically serve people without health insurance. Some of the present examples include: Reliance Medical Centers, Southern Jersey Family Medical Centers, Inc. (FQHC), John Cronin Dental Clinic–Atlantic County Intergenerational Services, UMDNJ of Galloway, and the Atlantic County Health Department programs. These are only a few of the options that would assist the uninsured and working poor and reduce the reliance on costly charity care, especially for advanced cancers.
- ✓ The healthcare system can be extremely complex, especially for senior citizens and those without insurance. People often need assistance in navigating the system. In the case of cancer, the lack of direction can result in a late-stage diagnosis or delayed treatment that will ultimately affect survival. NJ EASE, a service through which seniors can access information, is available on the state level and should be advertised to increase its visibility. A similar service is necessary for younger citizens as well, especially minorities.
- ✓ Cancer outreach and educational information are also important for the adult population. Most outreach projects are local, but state assistance would be helpful. Statewide

marketing plans would reduce redundancy of effort. Designated funds for outreach are necessary. A state focus on media packages airing on television and radio across the state would be more cost efficient than individual campaigns developed locally.

- ✓ Most of this report has focused on the uninsured, underserved, and low-income populations. However, it is clear that many affluent people are also unaware of the importance of cancer screening. This may result from lack of information, lack of understanding, cultural issues, or simply busy lifestyles. Schools can be used to reinforce cancer screening messages and to establish positive behaviors early in life. It is recommended that teaching about cancer be specifically mandated, most appropriately in high school health classes. All students should exit high school with a clear understanding of the importance of cancer screening, the risks associated with certain health behaviors, and signs and symptoms of a variety of cancers. In addition, this information should include other chronic diseases such as heart disease and diabetes. Students should understand health issues and the importance of health insurance. Teaching young people the importance of healthcare will positively affect the future health literacy and educational level of adults. Also, students should be given materials that can be taken home to their parents, grandparents, and other family members, thereby improving their families' health as well.
- ✓ The New Jersey Behavioral Risk Factor Survey should be expanded to increase the number of people per county surveyed, providing a sufficient database for each county. Additional questions about cancer screening and public knowledge should be included.

Closing Remarks

The Cancer Capacity and Needs Assessment provides a detailed baseline assessment of cancer burden and resources for Atlantic County. The data, interpretations, and recommendations were developed to assist a wide array of public health and medical personnel with standardized information and detailed analyses that can help guide and focus their efforts at the county level, including such local health initiatives as the forthcoming Community Health Improvement Plans. These recommendations will serve as a part of the continuing comprehensive cancer control efforts of the Office of Cancer Control and Prevention of the New Jersey Department of Health and Senior Services; the Governor's Task Force on Cancer Prevention, Early Detection and Treatment in New Jersey; and the University of Medicine and Dentistry of New Jersey.

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